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PAGES INCLUDING THIS SHEET#: 3

MESSAGE:

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MEMORANDUM: December 16, 1997

FROM:

Andrew M. Platt, DynCorp

TO:

Jeanne Griffin, RPA Region 5

SUBJECT:

Sauget I HRS: Request For Submission of Data Necessary to Resolve

Outstanding Data Quality Issues

Jeanne,

Here are the detailed lists of data needs and quality control information we discussed in our telephone conference call on November 18. These lists were prepared by DynCorp chemist, Peter Novick, who was also present on the telephone call. Please forward this material to the appropriate individuals in Illinois. If you have any questions, please contact me at one of my work numbers.

(540) 937-4527 (703) 519-1432

Thanks, Andy

SAUGET I HRS DISCUSSION ON THE "DATA USRABILITY DOCUMENT"

This Review is in response to the Data Useability Review [Appendix A] submitted by Menzie-Cura/NEH, The Data Useability Review is a submission resulting from the proposal of the Sauget Area I site to the NPL, and the Response to Comments.

The Data Useability Review covers a three-tiered discussion of HRS related technical parameters. DynCorp will respond as necessary to each of the tiers of comments. The first tier concerns the lack of supporting data concerning the "X"-samples. It is these samples (one hit, and two background samples) that were used to demonstrate a documented release. This first submission is in response to the comments regarding the total lack of technical supporting data and reporting documentation used to indicate a documented release. This is the most serious of the criticisms that must be addressed regarding the Sauget I site.

The second tier reflects specific technical criticism with the use of particular soil and sediment samples ["SD/SS" samples] that were used to verify the chemical composition of the Sauget Sites. Upon reconciliation of the first-tier "X" samples, then an appropriate chemical and technical rebuttal of the M-C/NEH report will be addressed. This will involve submission of a relatively small volume of data, primarily concerned with data for Aroclors, particularly determination of calibration factors and the associated Aroclor peaks; the use of the retention times employed in quantitating peak areas in standards and samples, the actual sample weights, injection volumes, and extract volumes; and their effects on analytical calculations. Regarding the inorganic questions concerning the "SS/SD" samples, minimal amount of additional data regarding inter-element correction factors, and their application to background correction are required. In addition to the second-tier of data requested, certain specific data regarding Sample X111 will also be requested.

The Third, and final tier of M-C/NEH comments regards the QA/QC issues of the data packages as a whole from which specific issues shall have been raised in the Tiers-I and -II questions, concerning the particular samples mentioned regarding QA/QC issues. For the most part, these data-useability questions may be resolved by Chemists by review of the existing raw data, assessing data quality and completenes, and performing representative calculations. Except for previously mentioned missing data, we expect to resolve most issue with the data on hand.

PART 1

Before a meaningful response can be made concerning the Sauget I HRS, certain missing documentation and preliminary data must be provided.

Upon receipt of the requested data, chemistry issues can be addressed.

DATA NEEDED

I) FOR "X" Samples [Sampled 1991]

1 Inorganic

- The "Traffic Report"/ Chain of Custody documentation must be provided, contain the appropriate signatures, station locations, and record of sample handling. Without this documentation, there is no way to associate the sampling location, the sample number, and verification of the laboratory receipt. In addition, for water samples, there is no other documentation that indicates if the inorganic samples were analyzed for total or dissolved metals.
- The statements that appear on all Inorganic CLP cover sheets affirming that the raw data were subjected to background correction, and that these corrections were applied before generation of analytical Results were not addressed, and the form was not signed. It is an extremely unusual event to receive an inorganic data package with these questions unanswered (this is the first in thousands of such Cover Sheets that this reviewer and his associates have seen without an appropriate response.
- 3) All Data Reporting Forms ("QC Forms") must be submitted (only Forms I had been submitted).
- 4) Raw Data are of fundamental importance: The components of the raw data permit verification, evaluation, and assessment of technical acceptance criteria for the Data Package and are critical for the response to comments. In particular, the more important criteria are enumerated below.

Those items that appear with a "" have the Calculated Results of specific QC criteria [i.e. ICE True Value, Found Value, and % Recovery] appearing on specific forms. However, without the raw data, these are unverifiable and are not scientifically reconstructible by an outside source [i.e., the PRP and their consultants].

Raw Data and Reporting Form Requirements [Details of Items 3 and 4 above]:

Real-time Instrument Printouts: Representative Sample Calculations; Correlation Coefficients; Raw Data Averages; Dilution Factors'; Instrument Detection Limits'; Interference-Check Sample Data1; Background Correction Factors; Laboratory Control Samples Results¹; Serial Dilution Results1; Initial Calibration Verification¹; Continuing Calibration Verification 1; Initial Calibration Blank Data 🔭 Continuing Blank Data 1; Method Blank Data1: Contract Required Detection Limit Verifications 1; Spike Sample Analysis¹; Duplicate analysis1; Analytical Spike Sample Results; Sample Preparation Logs; Sample Percent Moisture Logs; Preparation Logs and Sources for Analytical Calibration Standards; Documentation of External QA/QC Standards; Laboratory Case Summary.

DATA NEEDED

II) FOR "X" Samples

2 Organic

- 1) All of the comments for the Inorganic "Traffic Report"/ Chain of Custody Documentation must also be provided, as mentioned above. Frequently, these documents are the same, and location of one set may complete the absence of the other set.
- All Data Reporting Forms ("QC Forms"); (only Forms I had been submitted). Although the primary "hits" of concern were Aroclors, the following data are required to address these specific results. All other data are required to permit acceptance of the Data Package as a whole.
- Data concerning quantitation of Aroclor peaks, including actual sample size,¹ injection volume¹, extract volume¹.
- 4) Data concerning the specific peaks used to determine the Aroclor Calibration Factors; the number and retention time of peaks quantitated in samples.
- 5) As indicated above for the inorganic samples, raw data: are of fundamental importance. The components of the raw data that permit evaluation, assessment, and technical acceptance criteria for the Data Package are enumerated below.

Those items that appear with a "in (appearing above and below) have the Calculated Results of specific QC criteria. However, without the raw data, these are unreproducible or scientifically unsupportable by an outside source.

Real-time Instrument Printouts;
Representative Sample Calculations;
Relative Standard Deviations 1;
Percent Difference Between Standards 1;
Retention Time Windows 1;
Instrument Response (peak area or height) 1;
Dilution Factors 1;
Instrument Detection Limits 1;
Instrument Performance Check Sample Data 1;
Method-, Storage-, and Instrument Blanks 1;
Initial and Calibration Verification 1;
Standard Resolution Check 1;
GPC 1, and Florisil Cleanup 1;

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Percent Difference in Pesticide Column¹;
Verification, and Preparation of Analytical Standards¹.
Initial Calibration Blank Data ¹;
Continuing Blank Data ¹;
Contract Required Detection Limit Verifications ¹,
Spike Sample Analysis¹,
Duplicate analysis¹,
Analytical Spike Sample Results¹;
Sample Preparation Logs, Sample Percent Moisture Logs;
Preparation Logs for Analytical Standards;
Documentation of External Standards;
Laboratory Case Summary.